## **CLAIMS**

What is claimed is:

- 1. An interrogator comprising:
- 5 a carrier oscillator connected to a transmitting mixer,
  - a receiver unit, and
  - an receiving high-frequency amplifier for amplifying the receiving high-frequency received by said receiver unit, wherein
- carrier generated by the carrier oscillator is interference-inputted to the receiving high-frequency amplifier, thereby modulating the receiving high-frequency.
  - 2. The interrogator according to Claim 1, wherein

said receiving high-frequency amplifier, said carrier oscillator, and said transmitting mixer are provided on an identical printed-circuit board, and

- said carrier oscillator is arranged between said receiving high-frequency amplifier and said transmitting mixer.
- 3. The interrogator according to either of Claims 1 or 2, wherein said carrier oscillator and said receiving high-frequency amplifier are arranged in an identical shield section.
  - 4. The interrogator according to Claim 1, wherein

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the interference-input from said carrier oscillator to said receiving high-frequency amplifier is executed by loose-coupling an antenna of the transmitter unit and an antenna of said receiver unit.

5. The interrogator according to Claim 1, wherein
the interference-input from said carrier oscillator to said receiving

high-frequency amplifier is executed by loose-coupling an output of said carrier oscillator and an input of said receiving high-frequency amplifier in a capacitor of low-capacitance.

## 6. The interrogator according to Claim 1, wherein

the interference-input from said carrier oscillator to said receiving high-frequency amplifier is executed by loose-coupling an output of said transmitting mixer and an input of said receiving high-frequency amplifier by mutual induction of transmission lines, which are parallel to each other.